

**METHOD OF SPHERE DECODING WITH LOW COMPLEXITY AND GOOD
STATISTICAL OUTPUT**

ABSTRACT

A symbol vector received from a multiple antenna transmitting array is
5 detected using a sphere decoder. The sphere decoder is used to select from
a set of candidate binary strings that string which is most likely to have been
transmitted. Soft information for use in a turbo decoder or the like is obtained
by considering cost functions for a set of candidate strings, including strings
derived from the most likely string by flipping one or more bits thereof.

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